

## 8. What is function? Discuss the benefits of using function.

### Solution:

A function is the block of segments that perform same specific and well defined task.

C program must contain one main function from where the execution of program begins. Every function must have an unique name.

### Types of function:

#### a. Library function:

Library function is a predefined function in a header file.

**Example:** printf(), scanf(), pow(), strcmp(), etc.

#### b. User defined function:

User defined function is a function created by a user to perform the specific task as per their need.

**Example:** area(), display(), CSIT(), etc.

### Benefits of using a function:

- Functions increase **code reusability** by avoiding rewriting of same code over and over.
- If a program is divided into multiple functions, then each functions can be independently developed. So, **program development will be easier**.
- Program development will be **faster**.
- Program **debugging** will be **easier**.
- Functions reduces **program complexity**.
- **Length** of the program can be **reduced** by using the functions at appropriate places.
- The **recursive call** is possible through function.
- Functions increases **program readability**.